Reconsideration and allowance in view of the foregoing amendments and the following remarks are respectfully requested. Specifically, favorable consideration of pending Claims 1 – 5, 7 – 17, and 19 – 41 is respectfully requested.

THE REJECTIONS UNDER 35 U.S.C.§103(a)

Claims 1 – 4, 12 – 14, 19, 22, 23, 25 – 33, and 36 – 38 were rejected under 35 U.S.C. §103(a) as being unpatentable over Lee, *et al.* (U.S. Patent 6,263,358; hereafter "Lee") in view of Choquier, *et al.* (U.S. Patent 5,768,515; hereafter "Choquier"). The Applicant respectfully traverses this rejection, and further requests that this rejection be reconsidered and withdrawn because the proposed combination of Lee and Choquier fails to fulfill one or more of the requirements necessary to establish a *prima facie* case of obviousness.

The basic requirements of a *prima facie* case of obviousness, according to MPEP §2143, are:

> [T]here must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art references...must teach or suggest all the claim limitations.

The Applicant respectfully submits that the proposed combination of Lee and Choquier fails to provide a suggestion or motivation for the

combination itself, and further the proposed combination fails to teach all the claim limitations.

For example, with regard to the method of **Claim 1**, it is asserted in the rejection that Lee, col. 3, lines 11-25 and col. 22, lines 1-19 teaches the claimed feature:

> (a) instantiating a plurality of stages, the plurality of stages comprising at least one stage for each of the plurality of sub-tasks, each stage comprising:
> a holding area: and
> a scheduling policy

In the cited portions of the reference, Lee describes at least two software modules comprising (i) organization data concerning inter-module relationship and (ii) executable software providing a collaboration or co-ordination strategy for use in negotiating with another software module in relation to task allocation (col. 3, lines 11-25). However, neither the rejection nor Lee describes any relationship between the aforementioned at least two software modules and the tasks and corresponding sub-tasks described at col. 22, lines 1-19. Thus, there is no teaching or suggestion of, at least, the claimed "instantiating a plurality of stages, the plurality of stages comprising <u>at least one stage for each of the plurality of sub-tasks</u>..." (emphasis added). The Applicant further submits that Choquier does not compensate for such deficiencies of Lee, nor is an assertion to that effect made in the rejection.

Further, the Applicant disagrees that receiving user input <u>for each agent</u> into task description editor 335 described at col. 29, lines 31-55,

with reference to FIG. 3 of Lee, teaches or suggests "for each of the requests, storing in a work packet data for performing a sub-task of the task." However, assuming *arguendo* that task description editor 335 may be characterized as a work packet, there is no teaching or suggestion whatsoever of the claimed feature, "(d) storing each work packet in the holding area of the at least one stage for the sub-task," of Claim 1. Instead, task description editor 335 is one of a set of editors included in user interface 305, wherein the editors are used to identify a set of agents, select agent functionality, and input task and domain-related data (Lee, col. 23, lines 45-47). Both the rejection and the reference fail to show how the user interface described by Lee teaches or suggests the holding area of Claim 1.

As a result of the lack of teaching by Lee teaching the aforementioned feature (d) of Claim 1, the Applicant submits that Lee further fails to teach or suggest the claimed feature, "(e) executing the sub-task on each of the work packets in the holding area in accordance with the scheduling policy of the at least one stage for the sub-task while refraining from executing other sub-tasks of the task, thereby maintaining locality of instructions and data in the cache."

It is respectfully submitted that Choquier does not address the deficiencies of Lee discussed above, with regard to Claim 1, nor does the rejection make any assertion to that effect. Therefore, it is submitted that independent Claim 1 and corresponding dependent Claims 2-4 are distinguishable over the proposed combination of Lee and Choquier. The

Applicant further submits that Claims 30-33 are distinguishable for at least the same reasons set forth above with regard to Claims 1-4.

The method of independent Claim 12 recites, in part:

> placing one or more work packets in the holding area, each work packet corresponding to an iteration of the sub-task required for the task and, containing data for performing the sub-task; and,
>
> performing the sub-task on each work packet in the holding area of the stage in accordance with the scheduling policy of the stage thereby maintaining data locality in the cache for the sub-task.

For reasons similar to those set forth above with regard to Claim 1, it is submitted that the description of task description editor 335 in user interface 305 in FIG. 3 of Lee does not teach or suggest the Claim 12 feature of "placing one or more work packets in the holding area..." and therefore Lee fails to provide any teaching that even suggests the further recited feature of "performing the sub-task <u>on each work packet in the holding area of the stage</u>..."

Choquier does not address the deficiencies of Lee discussed above, with regard to Claim 12, nor does the rejection make any assertion to that effect. Therefore, it is submitted that independent Claim 12 and corresponding dependent Claims 13 and 14 are distinguishable over the proposed combination of Lee and Choquier. The Applicant further submits that Claims 36-38 are distinguishable for at least the same reasons set forth above with regard to Claims 12-14.

The computer-readable medium of independent Claim 19 recites, in part:

> a computer-readable medium having stored thereon a plurality of stages, there being at least one stage for each sub-task, each stage comprising:
>
> a holding area for holding a batch of the plurality of work packets; and,
>
> a scheduling policy; and,
>
> a processor for identifying a stage of the plurality of stages and performing an iteration of the stage's sub-task on each of the batch of work packets in accordance with the scheduling policy of the stage thereby maintaining a locality of data in a cache of the processor.

It is respectfully submitted that neither the rejection nor Lee describes any relationship between the at least two software modules and the tasks and corresponding sub-tasks described by Lee at col. 22, lines 1-19. Thus, Lee fails to teach or even suggest, at least, the claimed "a computer-readable medium having stored thereon a plurality of stages, there being <u>at least one stage for each sub-task</u>..." (emphasis added). The Applicant submits that Choquier does not compensate for the aforementioned deficiency of Lee with regard to Claim 19, nor is an assertion to that effect made in the rejection.

Further, the Applicant respectfully submits that the description of task description editor 335 in user interface 305 in FIG. 3 of Lee does not teach or suggest the Claim 19 feature of "a holding area for holding a batch of the plurality of work packets..." and therefore Lee lacks any

teaching that would even suggest the further recited feature of "a processor...performing an iteration of the stage's sub-task on each of the batch of work packets..."

The Applicant submits that Choquier does not address the deficiencies of Lee discussed above with regard to Claim 19, nor does the rejection, make an assertion to that effect. Therefore, it is further submitted that independent Claim 19 and corresponding dependent Claims 22, 23, and 25-29 are distinguishable over the proposed combination of Lee and Choquier.

Accordingly, for at least the reasons set forth above, it is submitted that the proposed combination of Lee and Choquier fail to render Claims 1-4, 12-14, 19, 22, 23, 25-33, and 36-38 obvious. Thus, it is respectfully requested that the corresponding rejection under 35 U.S.C. §103(a) be reconsidered and withdrawn.

Claims 5, 7 - 11, 15, 17, 20, 24, 34, 35, 39, and 41 were rejected under 35 U.S.C. §103(a) as being unpatentable over Lee in view of Choquier and further in view of Austvold, et al. (U.S. Patent 6,266,708; hereafter "Austvold"). The Applicant respectfully traverses this rejection as well, and further requests that this rejection also be reconsidered and withdrawn.

Claims 5 and 7-11 depend from Claim 1, and are therefore distinguishable over the proposed combination of Lee and Choquier for at least the reasons set forth above regarding Claim 1. Further, Austvold

does not compensate for the deficiencies of Lee and Choquier, described above, with regard to Claim 1. More particularly, Austvold fails to teach or suggest the claimed "instantiating a plurality of stages, the plurality of stages comprising <u>at least one stage for each of the plurality of sub-tasks</u>..." (emphasis added).

Further, Austvold fails to compensate for the lack of teaching of, "(d) storing each work packet in the holding area of the at least one stage for the sub-task," as recited in Claim 1. Therefore, there is no basis upon which Austvold could teach or even suggest the further recited, "(e) executing the sub-task on each of the work packets in the holding area in accordance with the scheduling policy of the at least one stage for the sub-task while refraining from executing other sub-tasks of the task, thereby maintaining locality of instructions and data in the cache."

Accordingly, since Austvold does not address the deficiencies of Lee and Choquier with regard to Claim 1, one of ordinary skill would have no motivation to add Austvold to such combination. Thus, for at least the reasons set forth above, it is respectfully submitted that Claims 5 and 7-11 are distinguishable over Lee, Choquier, and Austvold. Claims 34 and 35 are similarly distinguishable over the proposed combination of references.

Claims 15 and 17 depend from Claim 12, and are therefore distinguishable over the proposed combination of Lee and Choquier for at least the reasons set forth above regarding Claim 12. Austvold does not compensate for the deficiencies of Lee and Choquier, described above,

with regard to Claim 12. In particular, Austvold does not address "placing one or more work packets in the holding area..." and therefore there is no basis upon which Austvold could teach or even suggest the further recited feature of "performing the sub-task <u>on each work packet in the holding area of the stage</u>..."

Accordingly, without addressing the deficiencies of Lee and Choquier, with regard to Claim 12, one of ordinary skill would have no motivation for adding Austvold to such combination. Thus, for at least the reasons set forth above, it is respectfully submitted that Claims 15-17 are distinguishable over Lee, Choquier, and Austvold. **Claims 39 and 41** are similarly distinguishable over the proposed combination of references.

Claims 20 and 24 depend from Claim 19, and are therefore distinguishable over the proposed combination of Lee and Choquier for at least the reasons set forth above regarding Claim 19. Further, Austvold does not compensate for the deficiencies of Lee and Choquier, described above, with regard to Claim 19. More particularly, Austvold fails to teach or suggest the claimed "a computer-readable medium having stored thereon a plurality of stages, there being <u>at least one stage for each sub-task</u>..." (emphasis added), as well as the feature of "a holding area for holding a batch of the plurality of work packets..." Therefore, there is no basis upon which Austvold could teach or even suggest the further recited feature of "a processor...performing an iteration of the stage's sub-task on each of the batch of work packets..."

Accordingly, since Austvold fails to address the deficiencies of Lee and Choquier with regard to Claim 19, one of ordinary skill would have no motivation to add Austvold to such combination. Thus, for at least the reasons set forth above, it is respectfully submitted that Claims 20 and 24 are distinguishable over Lee, Choquier, and Austvold.

For at least the reasons set forth above, it is submitted that the proposed combination of Lee, Choquier, and Austvold fail to render Claims 5, 7-11, 15, 17, 20, 24, 34, 35, 39, and 41 obvious. Thus, it is respectfully requested that the corresponding rejection under 35 U.S.C. §103(a) be reconsidered and withdrawn.

Claims 16, 21, and 40 were rejected under 35 U.S.C. §103(a) as being unpatentable over Lee in view of Choquier and further in view of Pase, et al. (U.S. Patent 5,566,321; hereafter "Pase"). The Applicant respectfully traverses this rejection as well, and further requests that this rejection also be reconsidered and withdrawn.

Dependent Claims 16, 21, and 40 are distinguishable over the proposed combination of Lee and Choquier for at least the reasons set forth above with regard to independent Claims 12, 19, and 36, from which they respectively depend. Further, it is respectfully submitted that Pase does not compensate for the deficiencies described above with regard to the aforementioned independent claims.

In particular, the proposed combination of Lee, Choquier, and Pase does not teach or suggest, with regard to Claim 16, the claimed "placing

one or more work packets in the holding area..." and therefore there is no basis upon which any of the references could teach or even suggest the further recited feature of "performing the sub-task <u>on each work packet in the holding area of the stage</u>..."

With regard to Claim 21, the proposed combination of Lee, Choquier, and Pase does not teach or suggest the claimed "a computer-readable medium having stored thereon a plurality of stages, there being <u>at least one stage for each sub-task</u>..." (emphasis added), or the feature of "a holding area for holding a batch of the plurality of work packets..." and therefore there is no basis upon which any of the references could teach or even suggest the further recited feature of "a processor...performing an iteration of the stage's sub-task on each of the batch of work packets..."

With regard to Claim 40, the proposed combination of Lee, Choquier, and Pase does not teach or suggest the claimed "placing one or more work packets in the holding area..." and therefore there is no basis upon which any of the cited references could teach or suggest the further recited feature of "performing the sub-task <u>on each work packet in the holding area of the stage</u>..."

Accordingly, since Pase does not address the deficiencies of Lee and Choquier, one of ordinary skill would have no motivation to add Pase to such combination to reject Claims 16, 21, and 40. Thus, for at least the reasons set forth above, it is submitted that the proposed combination of Lee, Choquier, and Pase fail to render Claims 16, 21 and 40 obvious.

Therefore, it is respectfully requested that the corresponding rejection under 35 U.S.C. §103(a) be reconsidered and withdrawn.

CONCLUSION

The remaining references of record have been considered. It is respectfully submitted that they do not compensate for the deficiencies of any of the references utilized in rejecting the pending claims.

All objections and rejections having been addressed, it is respectfully submitted that the present application is now in condition for allowance. Early and forthright issuance of a Notice of Allowability is respectfully requested.

Respectfully Submitted,

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